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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/666,381	5,381 09/19/2003		Vikram Joshi	13176.426DIUS (.456)	8948	
24283	7590	09/29/2005		EXAMINER		
PATTON E			LEE, EUGENE			
1660 LINCO SUITE 2050			ART UNIT	PAPER NUMBER		
DENVER, (CO 80264	1	2815			
			DATE MAILED: 09/29/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application	Vo.	Applicant(s)					
		10/666,381		JOSHI ET AL.					
Office Action Summary		Examiner	· · · · · · · · · · · · · · · · · · ·	Art Unit					
		Eugene Lee		2815					
Period fo	The MAILING DATE of this communication app or Reply	ears on the co	ver sheet with the c	correspondence addre	ess				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period wire to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS 36(a). In no event, I will apply and will ex , cause the applicati	COMMUNICATION however, may a reply be tin pire SIX (6) MONTHS from ion to become ABANDONE	N. nely filed the mailing date of this comr D (35 U.S.C. § 133).					
Status									
1)	Responsive to communication(s) filed on 20 Ju	uly 2005.							
· —	This action is FINAL. 2b) ☐ This action is non-final.								
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposit	ion of Claims								
4) 🖂	Claim(s) <u>56,57,59-63</u> is/are pending in the app	olication.							
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)	Claim(s) is/are allowed.								
-	☑ Claim(s) <u>56,57 and 59-63</u> is/are rejected.								
	Claim(s) is/are objected to.								
8)	Claim(s) are subject to restriction and/o	r election requ	irement.						
Applicat	ion Papers								
9)	The specification is objected to by the Examine	er.							
10)	10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
40.	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
11)	The oath or declaration is objected to by the	xaminer. Note	the attached Office	e Action of form P10	-132.				
Priority	under 35 U.S.C. § 119								
а)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau See the attached detailed Office action for a list	ts have been r ts have been r rity document u (PCT Rule 1	received. received in Applicat s have been receiver 17.2(a)).	ion No ed in this National St	tage				
	ce of References Cited (PTO-892)	4)	Interview Summary Paper No(s)/Mail D	y (PTO-413) Date					
3) 🔲 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date		Notice of Informal I	Patent Application (PTO-1	52)				

Paper No(s)/Mail Date _

Application/Control Number: 10/666,381

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 56, 57, 59 thru 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 56 recites the limitation "said insulator layer" in line 5 of said claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claim 63 is rejected under 35 U.S.C. 102(e) as being anticipated by Basceri et al. 6,281,142 B1. Basceri discloses (see, for example, FIG. 3) a semiconductor device (integrated circuit) comprising a gate electrode (switch) 12, capacitor, and barrier layer (conductive oxygen barrier) 32. In column 5, lines 25-36, Basceri discloses the barrier layer may comprise titanium aluminum nitride.

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Allowable Subject Matter

- 5. Claims 56, 57, and 59 thru 62 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
- 6. The following is a statement of reasons for the indication of allowable subject matter: The references of record, either singularly or in combination, do not teach or suggest at least an integrated circuit comprising a conductive oxygen barrier wherein said conductive oxygen barrier includes a side edge portion and said insulator layer comprises a moat region, said moat region being defined partially by a moat sidewall and a moat bottom, and said moat sidewall including said side edge portion of said conductive oxygen barrier.

Response to Arguments

Applicant's arguments with respect to claims 56, 57, and 59 thru 63 have been considered 7. but are most in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after Application/Control Number: 10/666,381

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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INFORMATION ON HOW TO CONTACT THE USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Lee whose telephone number is 571-272-1733. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571-272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eugene Lee September 19, 2005

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